

Newtown Creek 3/27/2013 CAG Meeting



Informational Handout



Current and Future Uses in Newtown Creek for Human Health Risk Assessment

An important part of the work done at Superfund sites is to understand whether there are unacceptable risks to human health from exposure to site-related chemicals. For large water-based and sediment-based Superfund sites like Newtown Creek, it is important to understand the types of activities that result in people being exposed to impacted sediments, water, and fish/shellfish tissue, both now and in the future. It is also important to understand where these activities occur and how often they may occur. People may be exposed to site-related contaminants because they use Newtown Creek for recreational activities such as walking and wading along the shoreline, swimming and scuba diving, boating and kayaking, or fishing and crabbing. Additionally, people may be exposed because they may work in the area and their work activities cause them to come in contact with Newtown Creek water and sediments. Exposure can occur when people come in contact with impacted sediments and water on their skin or accidentally ingest sediment or water, inhale contaminated in the air, or eat impacted fish and shellfish, and the frequency (days per year), duration (years) and intensity (amount of contact with contaminated media is critical to understanding these current or potential exposures. This handout is meant to describe the activities that the U.S. Environmental Protection Agency (EPA) believes may occur now and in the future at Newtown Creek, where in and around Newtown Creek these activities occur, and to ask for additional comments from the public.

Today, the major land uses around Newtown Creek and its side channels include industrial and commercial activities and the area is designated as a Significant Maritime Industrial Area. People working in these types of jobs along Newtown Creek may come into contact with water and sediment, and inhale contaminants, as part of their jobs, but this exposure may not happen very often or for a very long period of time. Specifically, due to the characteristics of the bulkhead and the limited areas of accessible sediment, exposure to sediments is not expected to be significant. It is not expected that the nature of this type of work will change in the future because Newtown Creek will always support these kinds of jobs. People also live near Newtown Creek and other people may come to Newtown Creek for recreational opportunities. However, access to Newtown Creek and its side channels to participate in recreational

activities is severely restricted by physical controls such as fences and bulkheads and security controls associated with the industrial activities around the creek. The limited areas at Newtown Creek where people can access the water or the shoreline are as follows:

- Manhattan Avenue Park – Canoe/Kayak Launch
- North Brooklyn Boat Club Temporary Boatyard

EPA is also aware that there is a small population of people who live on boats anchored along the Queens side of the creek near the mouth, and that access to these boats is at one of the few places along the banks where sediment is accessible.

Each of these areas contains a combination of physical barriers and/or use restrictions, which limit access and exposure to the water, sediment, and fish/shellfish of Newtown Creek. Therefore, some or many of these activities may be restricted to a few very limited areas, mostly near the mouth of Newtown Creek near the East River, and may occur infrequently.

To summarize, the types of human activities and possible exposure to Newtown Creek water, sediment, air, and fish and shellfish tissue that currently occur in Newtown Creek may include the following:

- Work-related activities along the shoreline or over the water (e.g., loading barges)—exposure to impacted water (more likely) and sediment (less likely) can occur, as well as inhalation of contaminants
- Recreational-related activities along the shoreline or in the water—exposure to impacted water and sediment can occur, as can inhalation of contaminants or ingestion of impacted fish and shellfish tissue from the following activities:
 - Wading in the water and walking along the shoreline
 - Swimming and scuba diving*
 - Boating, including kayaking and canoeing and sail boating*
 - Fishing and crabbing*

EPA does not expect that these types of human activities will change very much in the future in most of Newtown Creek, because Newtown Creek will always support many commercial and industrial uses.

*The current New York State Waterbody Classification for Newtown Creek (Class SD – Fish Survival) and current New York State Department of Health fish consumption advisories for Newtown Creek provide further natural or man-made limitations on the use of Newtown Creek for these types of recreational activities.